

communicating with an access server via a plurality of communication channels corresponding to the point-to-point communication sessions in response to the received encapsulated packets.

*Conf A*

27. (New) The method according to claim 26, wherein one of the point-to-point communication sessions corresponds to a first network service provider, and another one of the point-to-point communication sessions corresponds to a second network service provider.

### REMARKS

By this amendment, claims 1-27 are pending, in which claims 1, 3-6, 9, 10, and 19 are currently amended, and claims 24-27 are newly presented. No new matter is introduced.

The Office Action mailed July 2, 2003 rejected claims 1-8, 10-17, and 19-23 as obvious under 35 U.S.C. § 103 based on *Brodigan* (US 6,473,427) in view of *Lowry et al.* (US 5,970,066), and in further view of *Vasamsetti et al.* (US 6,584,073), and claims 9 and 18 as obvious under 35 U.S.C. § 103 based on *Brodigan* in view of *Lowry et al.*, in view of *Vasamsetti et al.*, and in further view of *Denap et al.* (US 6,490,273).

The specification has been amended to correct minor grammatical errors.

Independent claims 1 and 19 recite “executing a communication software on **a plurality of end user stations** that communicate over a local area network (LAN) supporting an Ethernet-based LAN protocol, the communication software being based upon a communication protocol that **establishes a point-to-point communication session**; ... selectively encapsulating the communication protocol packets using the Ethernet-based LAN protocol; **forwarding the encapsulated packets to a customer premise equipment (CPE) that is coupled to the LAN.**”

Independent claim 10 recites “each of the **plurality of end user stations** executing a

communication software that is based upon a communication protocol that **establishes a point-to-point communication session...**, each of the plurality of end user stations selectively **encapsulating the communication protocol packets** using the Ethernet-based LAN protocol; a **customer premise equipment (CPE) coupled to the LAN and configured to transmit the encapsulated packets.”**

After careful study of the rejection of independent claims 1, 10, and 19, it appears that the Office Action misunderstands the claimed invention. In support of its rejection, the Office Action, on page 2, asserts that *Brodigan* discloses “a plurality of PC users 48 (a LAN of user stations) coupled to CPE device 42 (CPE)” and that “CPE data device 42 is coupled to the PC users for transmitting data signals (packets) to service providers (transmitting packets by a CPE that is coupled to the LAN users).” *Brodigan*, in fact, does not support this interpretation, in that the PC 48 is not a plurality of PC users, but only a single PC that communicates with the CPE data device 42, whereby the 10baseT port 46 is associated with well known VDSL PVC 44. (Col. 4: 40-46) *Brodigan* further states that generally one of data service providers 16, 18, and 20 are individually connected to PC 48 to transmit and receive data signals with PC 48 along a system PVC. (Col. 4: 57-59) There is no mention of the 10baseT port as supporting a LAN; the Office Action surmises so without support of *Brodigan*. One of ordinary skill in the art would appreciate that although 10baseT is a LAN protocol, the 10baseT connection to the PC 48 need not imply that the PC 48 is behind a LAN. Architecturally, *Brodigan* resembles the conventional system of FIG. 6A explained in Applicants’ specification (pages 3-4).

Even assuming that *Brodigan* contemplates (without any explicit description) the use of multiple PCs, at best, the *Brodigan* system is no better than the convention system identified in Applicants’ specification (FIG. 6B, pages 4-5), whereby a LAN 637 provides connectivity to multiple PCs 633, 635.

That is, unlike the claimed invention, the *Brodigan* system does not support (and cannot disclose) a plurality of point-to-point communication sessions via the CPE data device 42. The secondary references of *Lowry et al.*, *Vasamsetti et al.*, and *Denap et al.* do not cure this deficiency. *Lowry et al.*, which was applied for a supposed disclosure of encapsulating Ethernet packets (Office Action, page 3), discloses a virtual Ethernet interface, which permits a first computer to form Ethernet frames using the MAC address of the physical interface card so that it appears to be originating from a second computer (see Abstract). *Vasamsetti et al.* was applied for a disclosure of an ISP connected to the Internet. The Office Action (page 5) applies *Denap et al.* for an accounting element that collects accounting information. Therefore, Applicant respectfully requests the withdrawal of the obviousness rejections.

Turning now to newly added claims 24-27, independent claim 24 is directed to method for supporting multi-user access to a data network and recites “receiving packets supporting a **plurality of point-to-point communication sessions initiated respectively by a plurality of hosts**, the packets being encapsulated by an Ethernet-type protocol.” New independent claim 26 is drawn to a method for supporting multi-user access to network services, and includes the feature of “receiving encapsulated packets from a single customer premise equipment that communicates with a plurality of hosts, each of the hosts being configured to establish point-to-point communication session for transport of the packets and to encapsulate the packets according to an Ethernet-type protocol.” These new independent claims are allowable for at least the reasons put forth for the allowability of independent claims 1, 10, and 19. Additionally, new claims 25 and 27 depend respectively from claims 24 and 26, and thus, should also be allowed.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved

issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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